**Reminders**

- Tomatoes can be harvested when they are ½ green and ½ red to prevent sunscald and to allow the development of a deeper red color during hot weather. The fruit will have the same quality as if it were vine ripened if allowed to ripen inside.
- Can plant potatoes if you have a source of seed potatoes.
- Can plant cabbage, broccoli and cauliflower from seed to be transplanted later

**TOMATO CRACKING**

Tomatoes often have problems with cracking caused by pressure inside the fruit that is more than the skin can handle. Cracks are usually on the upper part of the fruit and can be concentric (in concentric circles around the stem) or radial (radiating downward from the stem). We don't know everything about cracking but here is what we do know. Tomatoes have a root system that is very dense and fibrous and is quite efficient in picking up water. Unfortunately, the root system can become unbalanced with the top of the plant. Early in the season it may be small in relation to the top growth resulting in blossom-end rot when the weather turns hot and dry. Later it may be so efficient that it provides too much water when we get rain or irrigate heavily after a dry spell. This quick influx of water can cause the tomato fruit to crack. Therefore, even, consistent watering can help with cracking. Mulching will also help because it moderates moisture levels in the soil. However, you can do everything right and still have problems with cracking in some years. We have evaluated varieties for cracking during our tomato trials at K-State. It takes several years worth of data to get a good feel for crack-resistant varieties but we have found some real differences. Some varieties crack under about any condition and others are much more resistant. The difference seems to be pliability of skin rather than thickness - the more pliable the skin the more resistance to cracking. The old variety Jet Star has been the most crack resistant of any we have tested including the newer types. Unfortunately, Jet Star is an indeterminate variety that puts out rampant growth. Newer varieties with more controlled growth are often more attractive to gardeners. Mountain Spring, Mountain Pride, Mountain Fresh, Floralina and Sun Leaper are smaller-vined types that have shown good resistance to cracking.

**How to Pick a Ripe Melon**

Telling when a melon is ready to be harvested can be a challenge, or it may be quite easy. It all depends on the type of melon. Let's start with the easy one. Muskmelons are one of those crops that tell you when they are ready to be picked. This can be of help to not only harvest melons at the correct time but also choose good melons when shopping. As a melon ripens, a layer of cells around the stem softens so the melon detaches easily from the vine. This is called "slipping" and will leave a dish-shaped scar at the point of stem attachment. When harvesting melons, put a little pressure where the vine attaches to the fruit. If ripe, it will release or "slip." When choosing a melon from those that have already been harvested, look for a clean, dish-shaped scar. Also, ripe melons have a pleasant, musky aroma if the melons are at room temperature. Watermelons can be more difficult and growers often use several techniques to tell when to harvest.

1. Look for the tendril that attaches at the same point as the melon to dry and turn brown. On some varieties this will need to be completely dried before the watermelon is ripe. On others it will only need to be in the process of turning brown.
2. The surface of a ripening melon develops a surface roughness (sometimes called "sugar bumps") near the base of the fruit.
3. Ripe watermelons normally develop a yellow color on the "ground spot" when ripe. This is the area of the melon that contacts the ground. Honeydew melons are the most difficult to tell when they are ripe because they do not "slip" like muskmelons. Actually, there is one variety that does slip called Earlidew, but it is the exception to the rule. Ripe honeydew melons become soft on the flower end of the fruit. The "flower end" is the end opposite where the stem attaches. Also, honeydews should change to a light or yellowish color when ripe, but this varies with variety.

**Spider Mites**

Most spider mites like summer weather. Look for stippling on the upper surface of the leaves as well as some fine webbing on the underside of the leaves. These tiny arthropods (they are not true insects) are often difficult to see due to their size and their habit of feeding on the underside of leaves. If mites are suspected, hold a sheet of white paper beneath a leaf and tap the leaf. Mites will be dislodged and can be seen as tiny specks on the paper that move about. Spider mite control can be challenging. A strong jet of water can be used to remove the mites but may not be as easy as it sounds. A high-pressure directed spray is needed to dislodge the mites. Since spider mites feed on the underside of the leaves, the spray is most effective if it comes from below. This can be difficult to accomplish with a thumb over the end of the hose. Some gardeners use a water wand hooked to a shut-off valve. The water breaker is then replaced by a brass nozzle. Specialized spray wands can also be used. For example, Mite-Y-Fine (miteyfine.com) has a wand that makes spraying the underside of leaves easy. Spraying once will not be enough. It is recommended to use 3 sprays spaced 3 to 4 days apart. Horticultural oils and insecticidal soaps (Safers, for example) can also be helpful. Spray early in the morning when temperatures are cooler and plants have rehydrated. Resprays will likely be needed.

**Budworms on Garden Plants**

If you have noticed a small hole in the buds of some of your flowers, you may have tobacco (geranium) budworm (Helicoverpa virescens). Though a number of flowers can serve as hosts, geraniums and petunias are most commonly attacked. The larva of this insect damages the buds by boring into them before they open. The caterpillars feed on the flowers for about a month and then drop to the soil to pupate. There are normally two generations per year, with the second causing the most harm. The striped caterpillars vary widely in color with green, red, light brown and dark forms possible. The color of the larva is related to the color of the flowers on which they feed. The adult of this insect is a moth. Damaged buds often fail to open. Those that do will show evidence of feeding on the blackberry receptacle and injuring drupelets on either side. Damaged drupelets are often scattered. Sunscald damage will be on the side of the fruit exposed to the sun and has several to many drupelets in an area being affected. Neither condition affects the eating quality of the fruit unless the stink bug releases the "stink" with which it is associated rendering the fruit inedible. By the time damage is seen, it is too late for control.

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